SECTION 07200

INSULATION

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. All insulation in the Work, except that specified in Sections 07531 and 09260.
 - 1. Board insulation at perimeter foundation wall
 - 2. Batt insulation in exterior walls and roof structure

PART 2 PRODUCTS

2.1 MATERIALS

A. Provide polystyrene board insulation conforming to ASTM C578, Type IV; extruded cellular type, with the following properties:

Thermal resistance Minimum R value of 5.0 per inch of thickness, at 75 degrees F

mean temperature

Thickness As indicated on the Drawings

Compressive strength Minimum 25 psi

Water absorption In accordance with ASTM C272, maximum 0.3 percent by volume

B. Provide batt insulation conforming to ASTM C665, Type III, Class A; preformed glass fiber batt or roll; with foil reinforced kraft covering one side for walls and roofs, with the following properties:

Flame spread 25 or less in accordance with ASTM E84

Smoke developed 50 or less in accordance with ASTM E84

Thermal resistance 3 1/2 inch thick=R11, 6 1/4 inch thick=R19, 9 1/2 inch thick=R30

in accordance with ASTM C518

2.2 MANUFACTURERS

- A. Board insulation
 - 1. Amoco Foam Products
 - 2. Dow Chemical U.S.A.
 - US Industries
- B. Batt insulation
 - CertainTeed Corp.
 - 2. Knauf Fiber Glass GmbH
 - 3. Owens-Corning Fiberglas Corp.

C. Adhesive for board insulation

1. Manufacturer and type recommended by insulation manufacturer for application.

PART 3 EXECUTION

3.1 INSPECTION

A. Board insulation

- 1. Verify that substrate, adjacent materials and insulation boards are clean and dry and ready to receive adhesive and installation.
- 2. Verify that substrate surface is flat, free of honeycomb, fins, irregularities and substances that may impede adhesive bond.

B. Batt insulation

- 1. Verify that adjacent materials are dry and ready to receive installation of insulation.
- Verify mechanical and electrical services within walls have been installed and tested.

3.2 INSTALLATION

A. Board insulation

- Apply adhesive to perimeter foundation wall as required by manufacturer's instructions.
- 2. Adhere boards with edges butted tight to adjacent boards and protrusions.

B. Batt insulation

- 1. Install batts, friction fit, in wall and roof cavities without gaps or voids.
- At roof installations secure 12 gage wires to joists at 16 inch centers to hold insulation in place.
- 3. Install insulation with factory applied membrane facing warm side of building spaces. Tape seal butted end joints and lapped side flanges. Tape seal tears or cuts in membrane.
- 4. Stuff loose insulation into miscellaneous voids and cavities. Compact insulation to no less than 75 percent of its normal volume.

END OF SECTION